

BARBELL EXERCISE by Keshub Ch. Sen Gupta B.A.

MUSCLE CONTROL by Bishnu Charan Ghosh B.Sc.

Printed by—Bijoy Krishna Das Lakshmibilas Press Ld. 14 Jagannath Dutt Lane, Calcutta

> Published by the authors 4, Gurpar Road, Calcutta.

Dedicated to YOUNG BENGAL



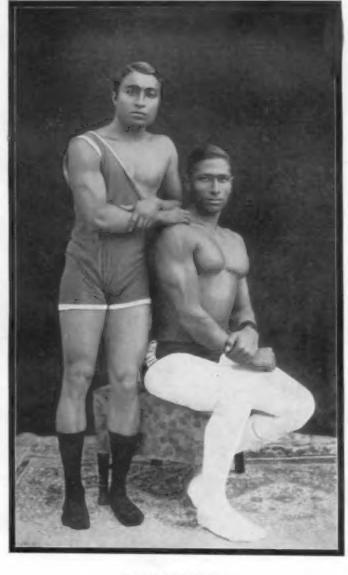
CAPT. J. N. BANERJEE, Bar-at-Law.

At the age of Seventy.

INTRODUCTION

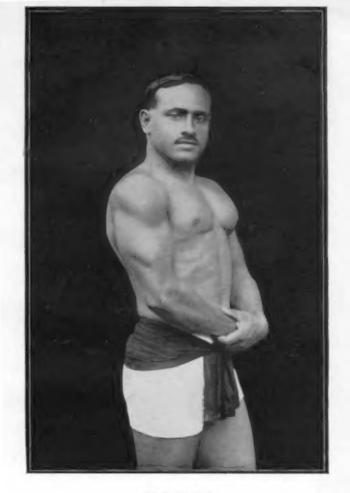
I have great pleasure in recommending the book Barbell Exercise and Muscle control to the Public for their acceptance. It has been written by two well known experts in the domain of Physicalculture—each excelling in their respective departments. The book contains expositions of methods and explanations which are sure to help not only the beginners but also those more advanced in the sphere of muscle culture. It has in it correct ways of practising with Berbells and as for muscle control it gives the simplest and perhaps the best method of acquiring control of muscles. I hope the book will fully succeed in the object for which it is intended.

InBannjee



THE AUTHORS.

Mr. K. C. Sen Gupta, B. A. (Sitting) and Mr. B. C. Ghosh, B. Se



OUR GURU.

Mr. R. N. Guha Thakurta, Director of Physical Exercises, The All Bengal Physical Culture Association, Instructor of Physical Exercises, The University Law College and City College, Calcutta.



Mr. K. C. SEN GUPTA. B. A.
What Barbell Exercises and Muscle Control can do.



Mr, B. C. GHOSH, B. Sc. What Barbell Exercise and Muscle Control can do,

PREFACE

I. Travelling over some of the districts, sub-divisions and villages of Bengal. I have gathered the experience that though the people are willing to take exercise, proper instructions and well equipped gymnasiums are not available. The want of the latter does not vitally affect us but in the absence of the former fine muscular development cannot be achieved. They asked me many questions about physical culture but I could not satisfy them fully as I was not able to stay anywhere for a long period. The want of a well written book about exercise was keenly felt everywhere and I was asked to write something about my experience in this line. It is their sincere desire and earnestness which prompted me and my dear friend. Mr. Ghosh to make this attempt. If the book can meet their requirements to some extent, we shall think our labour amply rewarded.

II. It may not be out of place here, if I fell you a word or two about my early life. I was found of outdoor games. Ha doo-do-doo and eadh, among the indigenous games were my special favourities. But while I was making a name in this line the well developed body and phenomenal strength of my elder brother Babu Narendra Nath Sen Gupta B. A. was a talk of the whole willage. He was an ardent follower of scientific physical exercises and soon I found out that though the outdoor games may produce some cleverness in hands and feet, a scientific and systematic exercise is necessary to have a well proportioned figure. My brother was my guide in early periods. Here I take the opportunity to offer him my sincerest gratitude.

III. A year or two afterwards when I was a student of the City College. I met the great. Prot. R. N. Thakurta. I was charmed with his good and sincere behaviour, and became an ardent pupil. It was lucky moment of my life for without his timely help all my early endeavours would have been import in the bud.

IV. The methods which I have followed all along are given in this book. Do not try to learn inuscle-control first, for it will make the muscles suff and check proper growth. After a few months' labour with the barbell when the inuscles have grown bigger, you can give them good shapes by practising the control.

k C Sen Gupta

General Instructions.

Always try to coax and not force your muscles to grow Excessive and tapid exercise is harmful. Avoid over-exertion and go ahead slowly and intelligently. A tew repetitions correctly preformed is of more benefit than any number, done in a clumsy way. Walk up and down during intervals between exercises and massage the particular muscle after each exercise.

Individual training is better than class work in a gymnasium. The latter may produce average healthy boys but for super-strength you have to pay a lot of attention to the way you are doing the different exercises and this can be better. Jone in the privacy of your own cellar of course you can ask an expert to see you through the exercises. Keep the doors and windows open. It is better to breather through the mostrils but if you feel exhausted you can exhale through your mouth.

Great exertion in youth (as in gymnastic teats) hinders the growth and brings a too early maturity which tends to shorten life.

Simple food is best. You can eat whatever you can digest and remember that you should eat to live and not live to eat. Keep your stomach easy, i.e. almost one fourth empty. With gradual development if you really feel (not think) that you require more food, eat three or four times so that your digestive system may not be taxed and masticate thoroughly what you eat. Try to enjoy your meal. Feel that every morsel of food is supplying you with vitality, strength and energy. Take a little rest before and after meals. At least seven hours of sleep are necessary for a student of physical culture.

Alcohol and other stimulants may produce apparent developments but they are nerve poisons and weaker the system. Above all try to cultivate will-power. Put will into everything you do and avoid all exciting thoughts.

We have heard many enthusiasts murmuring for proper clothing, well-equipped gymnasium and so on, and attributing their failures to want of these things. Let us tell these friends of ours that no station in life is a bar to physical culture. Of course a man may make better progress by working under pleasant conditrops but most of the failures are due to the fact that too much attention is paid to getting those pleasant conditions and too little to the method of work.

RARREII EXERCISE

Fig. IA Position

Stand and grip the rod of the Barbell with a lower hold is in fig. A, and keep it at arms length man your thigh

Fig. 1B.—Position

Now curl the Barbell and bring it to the shoulder level keeping your upper arms fixed and pressed with the side muscles (Latissimus dorsi) and finish it as in figure 1B.

Muscles developed... Specially the Biceps.

Weight to be adjusted... .. 20 lbs No of times to be taken..... 10 ten



Fg JA



1: 10

Grip the rod of the Barbell with a top hold & keep it at the shoulder level. Stand straight with legs a little apart. i. e.

Assume position as in fig. 2A.

Fig. 2B, Position

Fig. 2A. Position.

Now lift the barbell upwards at arms length pressing slowly the same a little backwards and pull out the rod at the same time so that pressure may be felt in the Deltoid & back muscles and finish it as in fig. 2B. Lower it down again to shoulder level and after a short pause press it again upwards as before.

After a short pause press it again upwards as before.

Muscles developed —Triceps, deltoid and Back.

We just to be adjusted —40 lbs

Weight to be adjusted.—40 lbs

No of times to be taken—10 (Ten.)



F. A





Fig. A. Position

Stan Las in Fig. 3A. Grip the rod of the Barbell with a top hold an Lkeep it at arms length near your thigh.

Fig. 3B. Position.

Now raise the Barb II to your shoulder level slowly keeping your upper am, fixed and also have your arms pressed with side muscles. Finish it as in Fig. 3B. Lower it down again slowly, tighten the triceps muscles and then release.

Note: While raising or lowering the Barbell put your attention to the upper part of your fore arm (Flex or carpiradialis.)

Muscles developed: Upper part of the fore arm, upper arms and the triceps

Weight to be adjusted ... 20 lbs.

Number of times to be taken ... 10 Fen



Fig. WA





Fig. 4A Position Take the position as in Fig. 4A. Grip the Barbell with lower hold leaving a space of 6 inches between your grips and support

n behind, just on your waist Fig. 4B. Position

Now raise the Barbell as much as you can keeping your body almost straight and give a out ward pull to the rod along the length of the rod. Stop a little in the position as shown in the Fig. 4B. Then come back to the original position Fig. 4A. Don't torget to contract the triceps muscles at the Fig. 4B. and release them at the Fig. 4A. Then change the grip from lower

hald to top hold and do the sam, exercise.

This exercise is for the special development of triceps muscles.

muscles. Weight to be adjusted -20 lbs.

Weight to be adjusted = 20 fbs.

No. at times to be taken = Lower hold 10 times and top hold 10 times.

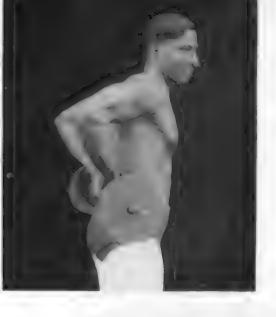


Fig 4A





Lie 5A Position

Stand straight logged with upper pair of the body at right angles to the lower part as in Fig. 5A. Let the Barbell hang at full length of your arms.

Fig. 5B Position

Without moving the body or legs lift the Barbell close to your body so that the rod of the Barbell touches the chest as in Fig. 5B. Drop it down sudd nly and take the jerk on the latissimus muscles. While pulling up contract the same muscles. Repeat several times. In this exercise the elbows must be pointed upwards and taised as high its possible.

Muscles developed ··

Latissimus dorsi and the muscles accross the breadth of the back.

Weight to be adjusted - 40 lbs.

No. of times to be taken -20 Ewenty



Fig. 5A





Fig. 6A Position. Take the position as in Fig. 6A. Grip the rod of the Barbell with a lower hold keep your arms out of touch with your body, droop your shoulder and keep, the Barbell, at arms length near

Fig. 6B. Position.

arms always separated from your body and the shoulder Muscles (Trapizius) always pushed upwards by the shoulder blades. Finish it as in Fig. 5B.

Now raise the Barbell to your shoulder level keeping your

Muscles developed. Trapizius muscles an the shoulder and

the biceps.

Weight to be adjusted 20 lbs

No. of times to be taken 10 Ten

your thich.



Fig. oA





Fig. 7. A Position. Take your position as in the 7.A (same as fig. 3.A). Keep your arms the d and press the gripped barbell inside bending your wrist and finish at as in the 7.B. Don't torget to contract the

fore arm muscles (Flexor muscles) at the position shewn in the fig. 7 B and relax them; in the position shewn in the fig. 7 A.

Muscles developed - Specially the fore arm - Weight to be adjusted - 30 lbs - No - of times to be taken - 10 Ten



1



Fiz 7B

Fig. 8 A Position

Take the position as in the fig. 8 A. Hold the rod of the barbell with a top-hold grip. But in the position fig. 8 A, the palm of the arm will be under the rod of the Barbell. Stretch your arm fully beyond your head.

Fig. 8 B Position.

Bring the Barbell slowly to your thigh keeping your arms always fully stretched. Contract and relax the chest muscles at every finish (at the fig. 8B). Take it back to the original position slowly and repeat.

Note: While pulling the Barbell from the position Fig.8.A put your attention to the strain on the ribs. Inhale and step breath at Fig.8A and exhale at Fig.8B. Again while going back from fig. 8.B to fig.8.A. Inhale at 8.B and exhale at 8.A.

Muscles developed. Chest muscles and the rib box

Weight to be adjusted 20 lbs

No, of times to be taken 10 Ten.



Fiz *A



Fiz 5B

Fig. 9 A. Position Assume the position as in the fig. 9 A, and hold the barbell just above your chest, lower position of your arms perpendicular

to the ground. Keep your head a little up from the ground, Fig 9 B Position

Exhale, (squeeze out your breath as much as you can) and get up slowly keeping your legs fixed on the floor and finish it as in fig. 9 B. Concentrate your mind to your abdominal muscles

and stiffen them while getting up or going down. In the position

fig. 9 B. take breath, then exhale again and go back to the fig. 9A

position slowly as before Muscles exercised -Abdominal muscles Weight to be adjusted -. "I lbs to start

No of times to be taken - 5 five.



Fig 9A



Fig GB

Fig. 10 A Position

Take the wrestler's bridge position with the back of your head resting on some soft bed such as a pollow. Hold the barbill just above your chest as shewn in the 10A (you can keep the barbell beyond your head and bring it on to your chest after taking up the wrestler's bridge position).

Fig 10 B Position

Press the barbell slowly upwards and straighten your arms. Again bring it to the former position and repeat. Take special care, so that the centre of your head may not get any pressure. In this exercise you shall all ways, use the back part of your head and never the centre, which, may affect your brain. Follow the figs shewn closely.

Muscles developed - Nick Weight to be a hosted +20 lb No of times to be taken -10 Ten



Fis 10A



Fig. 10B

Fig. 11A. Position

Stand straight with the test about a first apart and with the toes pointing inwards as clearly shown in Fig. 11B. Hold the Barbill on your shoulder as shown in Fig. 11A.

Fig. 11B Position

Then sit down slowly bending the knees in tull as shewn in the Fig. 11B. Come back again to the original position where you are to contract and then relax your thigh muscles. Repeat the exercise. Breathe out when you sit down and breathe in when you stand up this will develop your thigh muscles. On the other hand if you sit down and get up slowly supporting your body on the toes raising your heel a little from the ground, it will develop specially your call muscles with those of your thigh.

Weight to be adjusted -40 lbs

No. of times to be taken -20 Twenty.



he IA



Fig ::B

the Barbell at your arms length near the thica. First grip the rod with (top hold grip) your right hand at least a toot away

left hand as usual with the same top hold grip as shown in the Fig 12A.

Fig. 12B. Position.

from the discs and support the other side of the rod with the

Fig. 12A, Position.

First of all addist some dises to one side of the rod. Hold.

Now raise your hands up slowly but keep the upper part of the arm which is near the discs pressed with the side mus less Finish it as in Fig. 12B. Then change the hands and do the same with your left hand.

This exercise will make your arms flat and thick.
Weight to be adjusted: 15 lbs.

No of times to be taken 10 Len



FR IIA



Fig. 13A Position. Adjust some discs as in fig. 13A. Hold the rod at your arms length near your thigh with the lower hold of your right.

hand and the top hold of the left as shewn in the Fig. 13A.

Fig. 13B. Position

that arm which is near the discs pressed with the side muscles. Finish it as in Fig. 13B. Then change the hands and do the same with your left hand.

Now raise your hands slowly but keep the upper part of

This exercise will make your arms thick and flat and develop the Biceps most.

Weight to be adjusted -15 lbs.

Number of times to be taken -10 Ten.



Fig. 13A

Fig 13B, Same as Fig. 123.

MUSCLE CONTROL

BY

B. C. Ghosh, B. Sc. B. L.

Preface

When you find time to sleep, to take your bath, to take your meals, you can easily find time for a little exercise which is no less important than any other dire necessity of life.

Some will say, "It is too late," but take the examples of my nephew and my elder brother and you will know that it is never too late to mend. My elder brother Mr. S. Ghosh, a father of three children, started exercise at the age of thirty. He was cured of dyspepsia and became a strong man afterwards. You can now judge him well from his photo and see how he built such a physique out of a ruined health. My nephew, Bijoy Kumar Mallick was a physical wreck till his sixteenth year. Doctors forbade him to read. But after his sixteenth year he took a fancy to physical culture. Three years of barbell and muscle controlling exercises made him wonderfully muscular.

Now my own story begins. The health examination by the Students' Welfare Committee of the Calcutta University in the year 1922 found me a weakling of nineteen, weighing only 68 lbs and having a girth of 25 inches round my chest. The gripping power of my right hand was 20 lbs, and that of the left was 18 lbs

After my Intermediate Examination in Science, three months' proper exercise under the direction of Prof. Thakurta brought my chest-measurement to 34 inches and my weight increased to 100 lbs. After this I became a student of the Bengal Engineering College, Sibpur. The professors and the students there found me a tolerably strong boy. They could not dream that I was a rickety boy only three months ago.

In all the college functions at Sibpur I used to entertain the gentlemen present with muscle control and many feats of strength such as taking a roller (weighing about two tons) on my chest, lying under a loaded bullock cart, allowing a motor car to run over one or normal man to jump on my obdomen from a height

of no less than 12 ft, twisting an iron bar into coils, taking hardest blows on my abdomen and so forth, all of which I had the opportunity to learn at the feet of my revered instructor, Prof. R. N. Thakurta. But my stay in the College greatly hampered my progress for I was out of touch with my professor all that time.

I learnt muscle-controlling before all this, when I was very young, from my beloved elder brother. Swami Yogananda Gin B.A., the founder of the Yogoda System of physical culture. He is now in America and is helping the people there by his system for the last twelve years. At the time when my bromer was here, I was very young and thin and would never practise it. But after Thakurta's system had improved my health, one day I chanced to see Mr. Chit Tun controlling his huge and shapely muscles. The audience shouted in wonder (for the art was then unknown in Bengal) and I knew that I could also perform the fear, only that I required bigger muscles to be better appreciated.

I began to take regular exercise and started controlling my muscles again. Soon I found that my muscles were becoming bigger and more and more shapely, and power of application of strength increased. After three months I had such control over my muscles that Prof. Thakurta and some of my friends forced me to give public demonstrations.

In my first performance I was awarded a medal by Lalu Babu, a Zemindar of Daeca. He perhaps could not know the amount of impetus he gave me. I have never met him again, but I pray to God to let him live long and do the same to other young men so that they may try to rise above common level and themselves become sources of inspiration.

Muscle-controlling makes the muscles shapely and increases the power of application of strength. But I should like to call it the second stage of development, for one should have big muscles before he starts controlling. Much has already been said about the development of muscles in the previous part and to follow them closely is what is required.

I have been appreciated by many. They have given me

according to my instructions and be benefited by them, I shall consider myself best rewarded. This is no difficult affair if you really care for it. There are

medals, lots of them I possess. But if a single rickety boy acts

many who have already learnt it but I want many more to learn, hence this humble attempt. B. C. Ghosh.

CONTRACTION

Raise you body on your ties, thus contract the calf inuscles Next contrast the thigh muscles and grateus maximus, their contract the attribmen, latissimus, ones (pectoralis), back, forearms (ov closing the open fists and bending the wrists). triceps, breeps and finally the neck and shoulder mustles. Now tivety contact all these muscles simultaneously and wait for simetime in the contracted position and us to find out if there is any muscle left uncontracted. You must be very careful to keep you take free from any strain. Contraction can also be done in another way by litting the arms and contracting the breeps sucking in the abodomen, taking out the latissimus, isolating the neck muscles. (Fix 1).



RELAXATION AND CONTRACTION

The first important thing that should be kept in mind is that perfect relaxation of muscles is as good as hardest contraction to build up muscles. One should feel the thrill of relaxation which is most important, for otherwise by sleeping only one might have attained a well developed body.

RELAXATION OF THE BODY

Stand with your legs and backbone straight and the heels six inches apart. Allow your muscles to droop one by one. Begin with the ealf and the thigh and then gradually work upwards relaxing the arm, the abdomen, the chest and the neck muscles. Look straight and keep your first half-open. In this position you will feel that a slight push will disbalance you. Guard yourself against contracting any muscle already relaxed when trying to relax another.

Then contract all the muscles again. At the same time Contract the back muscles. (Fig. 2) But relaxation must be done with arms drooping.



The third method of Contraction is shown in Fig. 3.

The special advantage of this method, over others, is that all the muscles especially the shoulder muscles are easily and at the

same time better contracted.



Fig. 3.

CONTRACTION OF THE BICFPS MUSCLES

1st method (Fix 4).

Stand in the relaxed position, denote the left fis ficulty Contract the biceps by bending the arm from the clow. Now lift the elbow and make your upper aim honzontal and at right angles to your chest. After the second movement concentrate your mind to the upper portion of the biceps (near the defoid muscle) which is now fully contracted. Slowly go back to the starting position and relax. The Repetition of this makes the biceps round, Lecause both the upper and the lower heads are simultaneously contracted. Do the same with the other arm Keep one arm perfectly relaxed when the other is put to work, This exercise should be continued till the bicens tighten up



Fig. 4

2nd method (Fig. 5.) Start from position Fig. 5, and bring the arm to the position

shewn in Fig. 4. (i. e., bring the arm at right landers to the body). Press the biceps against the chest muscles and lower down the elbow and finally relax to, arm. Do the same with the other arm, repeat the exercise till the biceps tighten up.



CONTROLLING OF THE BICEPS.

Controlling of any muscle is nothing but to contract and telax the muscles without any movement of the limbs or contraction of any other muscle.

To control the biceps stand in the pistion (Fig. b.) and relax the muscles. Now without moving any part of the body, try to contract the bicops as far as practicable, and then relax Pause a life between the two operations of contraction and relaxation. Rapid movement is not possible, for a beginner With grad is a practice one will find it comparatively eas, to do away with the pause and will be able to give to the biceps a vibratory motion.



Fig. 6.

ISOLATION OF THE TRICEPS

First method (Fig. 7.)

This is my method of isolating the triceps. My nephew Bioy Mullik is showing the triceps by this method

Push your shoulder up and move the arm away from the chest with the triceps beyond the tatissimus. Hold the wrist with the other hand and contract the deloid by pressing the arm against the latissimus, but keep your triceps relaxed. This will bring out the line of demarcation between the deloid and the triceps. Now slightly contract the triceps.

CONTROLLING at this position is very easy, for by pressing the arm you can contract it and telax and make it dance at your will.



Fig. 7.

Second method.

Interlock your fingers and throw your chest forward (Fig. 8.) Grip firmly and my to pull the hands apart. This brings out the

details of the triceps.

CONTROLLING in this position is easiest for contraction and relaxation can be effected by increasing or decreasing the pull.

You can in we the muscles alternately and simultaneously to

make the affair more interesting.



Fig. 8.

Third method,

Stand as in fig. 9, and lower down your shoulder. Press the biceps with the chest muscles. This brings out all the muscles of the upper arm.

CONTROLLING can be effected by alternate contraction and relaxation by increasing or decreasing the pressure



F1g. 9.

Isolation of the fore-arm muscles.

Keep your fore arm at right angles to your upper arm and tighten the fore-arm mustles by bending the wrist as much as practicable. For Letter effect press the breeps as in the Fig. 10.

To CONTROL Sightly open and close the figers in rapid succession. This will create a Vibrators in atom in the tore-arm.



Fig. 10.

ISOLATION OF THE DELTOID

Lower down the shoulder, his your clow-up, and keep your fist at the back of your head as in the Fig. 11.

TO CONTROL keep your fist always pressed to your body. Lower down your shoulder and quickly take it up rotating your arm near the shoulder joint, or you can contract and relax the deltoid inusele at that position.



ISOLATION OF THE SHOULDER MUSCLES (Trapezius) Stand with your hands behind your back. In terlick your fineers stoop down a little and press up your shoulder muscles with the

shoulder blades.
TO CONTROL press up the muscles with the shoulder blade

and then relax. Rapid and successive in venicits will produce a beautiful up and down motion, of the shoulder muscles.



Fig. 12

ANOTHER METHOD

shoulder rains to with the shoulder blade and give a twisting movement to the arms the will burne out the triceps, the delitoid

Open but the Julias as snewn in the fir. 13 Pressup the

and the shoulder has les vers well,



THROW OF THE CHEST.

Clasp your hand as in the fig. 14. Inhale fully and then press up your chest muscles with your upper arm.



Fig. 14

ISOLATION OF THE CHEST MUSCLES

Deepen the collar-bone pit as in Fig. 15. Then raise up your arm without disturbing the pit already made. Now suffer your arms and try to contract the chest muscles in that position. The chest muscles will be isolated as in the Fig. 15.

To Control, alternately contract and relax without moving any other limb. Controlling of the chest muscles is more easily done by standing in the relaxed position, lifting the shoulder a little and simply contracting and relaxing the muscles. After good practice you can give them a rapid vibratory motion.



Fig. 15

LATISSIMUS MUSCLE.

Then, lift your arms a little to give a full view of the latissimus

To show the latissimus muscles, broaden the back by pressing out the latissimus muscles with the Shoulder blade.



Fig. 16

LATISSIMUS AND SERATUS.

With the latissimus, the seratus muscles can also be isolated.

For better effect, into lock the fingers and rest their against the

back of the head. Now raise the elbows as tar as practicable (almost pointing to the ceiling) and at the same time pull up the

latissimus muscles. Repeat this exercise and in no time both the latissimus and the seratus muscles will become very prominent



ANOTHER METHOD.

The following is a very good exercise for the development of the latissimus muscles. Stoop and bend your legs a little. Fix your arm under the thigh. Now broaden your back by pushing the latissimus muscle with the shoulder blade and at the same time try to pull up your thigh with your arm. The resistance made by the thigh will bring out the latissimus muscle to its 6.9 extent.

Relaxation and contraction in this position gives a beautiful control over the lavissimus muscle and develops it immercely. Do the same by putting the other arm under the thigh



Fig. 18.

To isolate mainly the intercostals and abdominal muscles (Rectus abdominis). Stand as in Fig. 19- Stoop down a little and

SERATUS, INTERCOSTALS AND ABDOMINAL MUSCLES.

contract the ribs and the abdominal muscles. Relax and contract again. Repetition of this exercise develops both the abdominal muscles and the intercostal muscles.



Fig. 19.

ANOTHER METHOD.

Stand as in Fig. 20. Exhale and their contract the ribs and bend the trunk a little sidewise and at the same time pull out the latissimus (ii. e. the side muscles) at the same time.

the latissimus (i. e. the side muscles) at the same time.

(This pose is given by a young school boy of fifteen years only. He has developed his body under my training in one year only. He was suffering from terrible asitima from his

childhood.)



Fig. 20.

DEPRESSION OF THE ABDOMINAL WALL

Stand with all your muscles relaxed. Give out the breath as much as possible. Then try to suck in the upper part of your abdomen. A depression is effected just below the ribs. (Fig. 21)

A beginner should stoop down a little and support his bodyweight on the thigh with his hands (Fig 21), and then proceed as above.



Fig. 21.

ISOLATION OF THE ABDOMINAL MUSCLES.

Stand in the relaxed position. Stoop down a little more than what has been shown in Fig. 21. Create the depression of the and minal wall as advised in the previous exercise. Try to stiffen the abdominal muscles without taking breath but stoop a little more and at the same time press the ower end of the abdominal inuscles (reit is abd minis) with the palm. This exercise must be practised with an empty stomach.

To Control suddenly isolate the must les, relax next moment and produce the depression.



Fig. 22

ISOLATION OF ONE ROW OF ABDOMINAL MUSCLES

(Fig. 23)

To isolate one row only, follow the instructions given in the previous exercise and when you have isolated the rectus abdominis, bend the body sidewise and try to relax the pressure of one side of the abdomen tyou must also relax the pressure given by the hand on that side. This isolation requires a little bit of practice. When you have succeeded in isolating one side, try to isolate the other. Now, when you have controlled your abdominal muscles, i.e., when you can isolate any one row of muscles at your will—solate the left-side first, then from that position isolate the right side and then again the left side and so on. This lond of successive isolation is called the sidewise controlling of the abdominal muscles.

After practising the sidewise controlling, one can easily learn the rolling of the abdominal muscles (not the rolling of the abdominal muscles in four different positions. First isolate the left row of the abdominal muscles if ig. 23) then the central cord thig. 22), then the right row, then evacuate the abdominal file. 21) and then begin again with the isolation of the left row. This cyclic movement, done in rapid succession is called the rolling of the rectus abdominis.

All these kinds of abdominal controlling is a sure cure to dyspepsia and improves the digestive power of a normal man.



Fig. 23

ISOLATION OF THE OBLIQUUS ABDOMINIS

Fig. 24

Stand in the relaxed position and create the depression of the akdonanal wail. There at this position contract the lower abdomen and at the same time stiffen the two sides of the abdomen. Always avoid the contraction of the abdominal muscles the fectus abdominist. This isolation is very difficult, and must be practised in almost an empty stomach, at least after twenty four hours of fasting,



Fig. 24

ISOLATION OF ONE OBLIQUUS ABDOMINIS ONLY Fig. 25

For isolation of a single muscle on one side only, after sucking in the abdomen try to contract one side. But the lower abdomen must be contracted first in both cases.



Fig. 25

ISOLATION OF THE BACK MUSCLES

Fig. 26

Grip the metale finger of the right arm with the left grip. Place the pulms at the bard of your head and contract the back mustles by present the similar blades ignost each other. Then slowely will ur the arms appear is without I sing the contraction of the back muscles and finish as in Fig. 26. This exercise is a bit painful at the start, but a fir a few days practice it becomes much easier.



Fig 26

ISOLATION OF THE BACK MUSCLES WITH ARMS.

Take the position as shewn in Fig. 27. Press the shoulder blades against each other and Contract at the same time the muscles of the arms. Now keeping all the Contractions of all

the muscles on the back and arms broaden the back as shewn in Fig 28. (i. e. in Fig 28 only the shoulder blades are not pressed against each other.)



Fe Li

ISOLATION OF BACK MUSCLES WITH ARMS. (Back broadened.)

Fig. 28.



F1: -4

EXERCISE FOR THE BACK MUSCLES.

broad.

Place the fists on the aip and press out the latissimus muscles with the shoulder blades as shewn in Fig. 29. Then squeeze the back by pressing the shoulder blades against each other and then open out the back again. This exercise makes the back



Fig. 's

ISOLATION OF THE THIGH MUSCLES.

Stand as shewn in the Fig. 30 Contract the muscles of the

thigh and give a twisting movement to the leg. (i. e turn the right

toe outwords keeping the right heel fixed.)

Do the same with the other leg pext.



Fig. 30.

ISOLATION OF THE BICEPS OF THE THIGH.

Stand with legs together. Lean forward a little and hold any fixed support for your balance, then raise the right leg pointing the too backwards as far as possible and finish as shown in

the toe backwards as far as possible and finish as snewn in Fig. 31. Do the same with the other leg. (A beginner should tie some weight to each of the legs, and raise the legs backwards one after the other.)



Fig. 31.

ISOLATION OF THE CALE MUSCLES.

the body on your toes, then come back to the starting position again. (For better effect stand at the edge of something a little high such as a brick and do the exercise his ding something fixed such as a wall or a fixed pole, for balance.)

Chanchal Prosad, B L

Stand with legs close together as shown in Fig. 32, and raise

This is the photograph of the call muscles of my class friend



Fig. 32.

A POSE BY BHUPESH KARMAKAR.

He won the best physique trophy of the year 1927 in The All India

14 1 ... i ... Midwal Callings and 15 a V

He is a student of the Medical College and is a very good muscles controller. He learnt the art under my special training.

Weight-lifting Competition.



CHAMPION WEIGHT-LIFTER. Let me introduce our Satva pada Bhaitcharjee a graduate

of the Calculta University. With my poor experience in weightlifting I trained him and he won the i.e.w. weight championship trophy that year and broke all provious records in The All India

Weight-litting Competition held in 1928.



Fig. 34,

This is the photograph of my elder brother, S. Ghosh, artist and strong man-holding soft sable hair brush and spring steel barbell rod with the same arm. Practically he gave me a great help in my physical Culture. I have already spoken something about him in my preface.



Fig. 35.

This is Mr. Lalit Roy, the man on the Roman Rings. He is

supposed to be the best Bengali boy in his work.



Fig. 36.

A SAD STORY.

Chakrabarty. He was known as THE IRON-MAN. The boy was exhibiting physical feats in a health exhibition. Amongst other feats he was passing bullock cart loaded with Twenty Four men over his ABDOMEN. Poor boy couldn't contract his abdomen properly and his spleen was injured. All possible medical help was of no avail. He expired that very night.

This is the photograph of my beloved student, Shusil Kumar



Fig. 37.

TRICEPS AND THE ABDOMEN POSE BY THE L'AMOUS

ATHLETE CHANDOO"

1

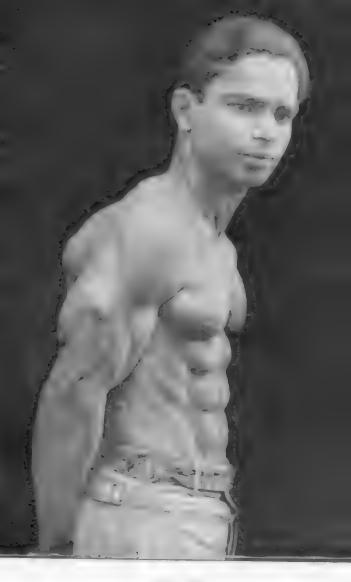


Fig. 38.

THE LATISSIMUS, THE BICEPS AND THE ARDOMEN

POSE BY THE SAME ATHLETE.

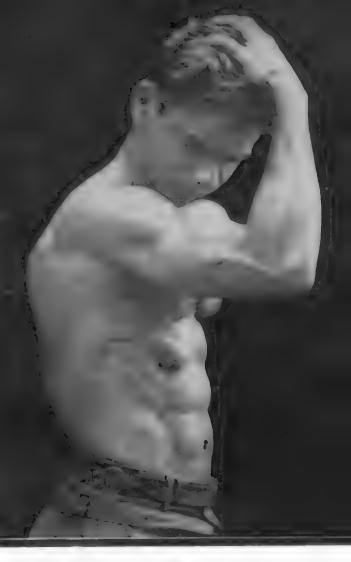


Fig 39.

ALL MUSCLES CONTRACTION

By S. Bose.

In my opinion Mr. S. BOSE, has the best musculer and the most uniform body, among all my students and friends.

Though he is very young, only Twenty two years of age yet he has mastered the art of posing. Hove him like my own younger brother. I did help him only a bit in his physical culture but in return he has helped me a lot- life has changed many of my ideas, about body and its formation. This novel and queer exercises are really very good and I have already started adopting them in my method of training and getting wonderful results. I remain ever greateful to him.

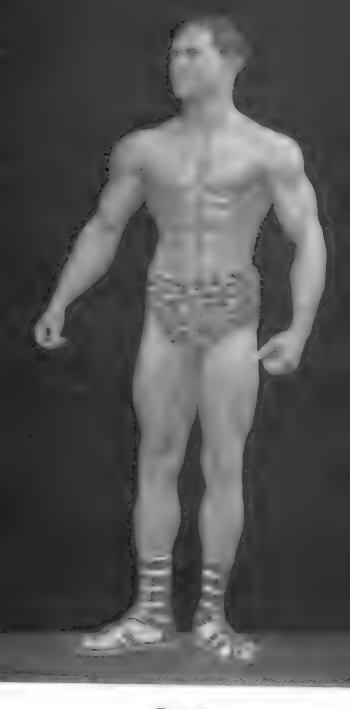


Fig. 40.

"THE PANTHER ON A LION."

Posed by S. Bose.



Fig. 41.

"THE LIVING STATUE"

Posed by S. Bose, with a marble statue.



Fiz. 42.

INTRODUCTION OF THE GENTLEMEN WHOSE PHOTOGRAPHS ARE GIVEN BEFORE.

Figs = 1, 4, 10, 15, 18, 26, Author Bishnii Ghosh

Figs -2, 3, 5, 14, 23, 29. Began Ray - The Wizard on the Roman Ring. He has got the thickest chest I have ever seen

Fig. 8, 16, 30 Mr. Preston of the Culcurta Police. He won the best physique trophy in the Ail linka weight Lifting Competition held in the year 1931. He is a very good muscle controller and fearnt the art under my training in no time.

Fig.—9, 12. Mr. Mool-Chand was my most ardent pupil. I have not met abother similar energetic man. He came from Punjab and learnt the art in Six months perfectly.

Fig. -- 17, is the Photograph of my friend Subodh Mukhenee B. Sc. His upper body is unique. He is also one of the best muscle controllers I have trained.

Fig -13, is the photograp of Mr. Radhasham Saw. He is also a very good musule controller, and he came second in a musule controlling competition held in the year 1930.

Fig. -7, 23, are the photographs of Master Bejoy Kumar Mullick my nephew—In the last four years he stood first in all the muscle controlling competitions held in the Country.

Fig.—6, is the photograph of the biceps of Master Moni Rov my student who is second to none on parallel bars. He is also after the Roman Rings. His peacock balancing on two hogers is really wonderful. He is only nineteen years old.

Fig.—20, is the photograph of Masse: "Natu". After S. Bose, he has the best muscular and most uniform body. He is the youngest of all my pupils. He is only fifteen years oid.

Fig.—31, is the photograph of the biceps of the thigh of Master Shusil Bhadra, my Student. He has got a very uniform body and very bic muscles. He has got the biggest triceps muscles. In my next edition I will add some of his photographs.

Fig. -22, 24, 25. are photographs of my beloved nephew Budha Lall Bose, I am training him only one year-but his ardent endeavour has lifted him above the common level. I was best in my abdominal control but he has surpassed by far his trainer in his wonderful abdominal control and amazed me, and the public as well, by tearing two and a half packet of cards. He also does a dangerous and at the same time wonderful feat of strength (i. e. the bending of an iron rod 5/8" in diameter by pressing by the throat against a wall. May God spare him a long life.

GHOSH'S GYMNASIUM

4. GURPAR ROAD, CALCUTTA.

Phone-B. B. 3132

Come-

YOUNG AND OLD—there is a different exercise for each of you—an experienced trainer can only rightly select them. Wrong method of exercise is worse than no exercise.

Just as you should know the right path if you want to go to a place, so also you must know the proper way of exercise to attain certain amount of development.

PHYSICAL DEFORMITIES, DYSPEPSIA, ASTHMA AND OTHER NERVOUS DISEASES AT ALL AGES ARE CURED IN NO TIME.

Phone: B. B. 1920 Tele: CALMONTOSH. Cal.

MOHUN TOSH BROS.

15, College Square, Calcutta

The Best House for:

Barbell, Pulley Weight, Parallel Bars, Horizontal Bars, Dumbbell, Developer and any other Gymnastic goods.

Specialist in:

Play Ground Apparatus and any and every kinds of Gymnastic outfitting work.

Suppliers to:

College and Schools, Y.M.C.A., University and Railway Institutes, Calcutta Corporation and many other Municipalities.

Highly spoken of and Recommended by:

Sir Nil Ratan Sircar, Dr. Rollo, Mr. R. N. Guha Thakurta, Mr. Bishnu Ghosh, W. Chit Tun, Mr. J. K. Seal, Arthur Raj and a large number of Medical men and physical Instructors of India, Ceylon and Burma.

Please ask for Catalogue for:

- 1. Gymnastic Goods.
- 2. Play Ground Apparatus.
- 3. Cricket, Hockey, Tennis & Badminton.
- 4. Football Etc.
- 5. Athletic Books.

"MUSCLE POSE" PHOTOGRAPHS

OF YOUR OWN

Come to

S. GHOSH & BROS.

4. Gurpar Road, Calcutta

Phone :

B. B. 3132

Because Mr. Bishnu Ghosh is the Director there.

All the Photographs published in this book were taken by them in Open Air and Neither in a Studio Nor by Artificial Light.

Genuine Muscle Pose Photographs on Post Cards of various Indian Athletes can be had of us at a very low price.

Our Portrait Paintings are as good as, if not better than, the photographs taken by us.